REMARKS

Claims 1-4, 6-15 and 17-33 are pending in this application. By this Amendment, claims 1, 4, 12, 15, 23-25, 27 and 29-33 are amended. The claims are amended to improve their grammar and clarity. In addition, the independent claims are amended to address the arguments raised by the Examiner in the Advisory Action dated June 14, 2006. In particular, the claims are amended to explicitly recite that the first converting unit receives image data and converts the image data into primary data, the second converting unit receives the same image data received by the first converting unit and converts that same image data into secondary data, and the dissimilarity calculating unit receives the primary data and the secondary data and calculates dissimilarity between the primary and secondary data to output tertiary data. No new matter is added by the above amendments.

Claims 1-4, 11-15, 22-28, 30 and 32 stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,537,496 to Katayama in view of Ball ("Sams' Teach Yourself LINUX in 24 Hours"). This rejection is respectfully traversed.

Katayama does not disclose or suggest many of the features attributed to it by the Patent Office. The Patent Office asserts that Katayama elements 28 and 30 correspond to the claimed first and second converting units, respectively. Although the Katayama density converter 28 receives image data from input buffer 26 to output N-bit image data, the Katayama gradient conversion table 30 does not receive the same image data (that is, the same image data received by the density converter 28) to output M-bit secondary data. Rather, as is clear from the Katayama disclosure, gradient conversion table 30 receives the N-bit image data output from density converter 28. Katayama's purpose is to provide M-bit data from N-bit data. Thus, Katayama does not disclose the claimed second converting unit that receives the image data (that is, the same image data received by the first converting unit) and converts that image data to the claimed secondary data. Rather, Katayama converts the N-bit

image data output by density converter 28 (which the Patent Office alleges to correspond to Applicants' claimed primary data) into the M-bit output.

Furthermore, Katayama does not disclose or suggest the claimed dissimilarity calculating unit that receives the primary data and the secondary data and calculates dissimilarity between the primary data and the secondary data to output tertiary data. There is no element of Katayama that receives the output of density converter 28 (alleged in the Office Action as corresponding to the primary data) and the output of gradient conversion table 30 (which the Office Action alleges to correspond to Applicants' claimed secondary data). The random number generator 32, alleged in the Office Action as either corresponding to or being a part of the dissimilarity calculating unit, does not receive or act upon the output of density converter 28 and the output of gradient conversion table 30. Although the Office Action (and Advisory Action) cite Fig. 5 and column 6, lines 3-19 of Katayama, these portions do not disclose or suggest what is recited in Applicants' claims. These portions of Katayama merely show the relationship between the various data, but they clearly do not teach calculating a dissimilarity between the N-bit data and the M-bit data. As is clear from column 6, lines 3-19, the N-bit data is not used at all to generate the output of the Katayama random-number generator 32. What Katayama teaches is that the 6 bit random number generated by random-number generator 32 has two bits that act on two bits of the M-bit image data to generate at least a portion of the extracted L-bits. See, for example, column 6, lines 14-23 of Katayama. No dissimilarity is calculated between the N-bit image data and the M-bit image data in Katayama.

Furthermore, while Ball may teach that it is known to store data, there is no suggestion from combining Katayama and Ball to store the output of the Katayama density converter 28 (alleged by the Office Action as corresponding to the claimed primary data) and the output of the random-number generator 32 (alleged in the Office Action to be the tertiary

data). The system of Katayama merely converts N-bit data to M-bit data to provide output image data. One having ordinary skill in the art would be taught from Katayama to store the output image data. There is no suggestion or reason to store the data in Katayama that is alleged by the Patent Office as corresponding to the claimed primary and tertiary data.

Moreover, there is no motivation or reason to calculate secondary data based on the primary data and the tertiary data as recited in Applicants' independent claims 27 and 29-33. The M-bit image data of Katayama (which the Office Action alleges corresponds to the claimed secondary data) is only produced from the output of the Katayama density converter 28 (which the Office Action alleges corresponds to the claimed primary data). Thus, the combination of Katayama and Ball does not disclose or suggest an arrangement in which the claimed primary and tertiary data are read from memory and then used to calculate secondary data.

Accordingly, withdrawal of the rejection is requested.

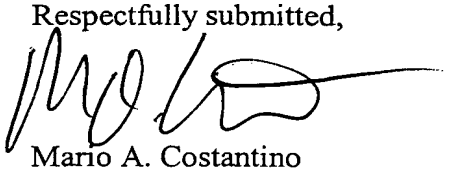
Claims 6, 7, 10, 17, 18 and 21 stand rejected under 35 U.S.C. §103(a) over Katayama in view of Ball, and further in view of U.S. Patent No. 6,038,369 to Imai. In addition, claims 8, 9, 19, 20, 29, 31 and 33 stand rejected under 35 U.S.C. §103(a) over Katayama in view of Ball, and further in view of U.S. Patent No. 5,754,683 to Hayashi. These rejections are respectfully traversed.

Imai and Hayashi do not overcome the deficiencies noted above with respect to Katayama and Ball. Accordingly, these claims are patentable for at least the reasons set forth above. Withdrawal of the rejections is requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe anything further would be desirable to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



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